

# Montgomery County Department of Transportation (DOT) Montgomery County Department of Environmental Protection (DEP)

# **Public Meeting**

Replacement of Dennis Avenue Bridge No. M-0194 over Wheaton Branch (by DOT) and Wheaton Branch Flood Mitigation (by DEP)







### **Presentation Agenda**

- Project Team Introduction
- Project Purpose and Need
- Preliminary Design Concepts
- Proposed Maintenance of Traffic During Construction
- Anticipated Project Schedule
- Obtain Community Input



## **Project Team**

#### Montgomery County Department of Transportation (MCDOT)

Barry Fuss Bridge Design Chief

Greg Hwang
 Bridge Design Project Manager for

Dennis Avenue Bridge project

Dewa Salihi Construction Contracts

Eric Willis Property Acquisition

Vincent Ho Traffic Engineer (Signing and Pavement Marking)

Stella Igbinedion Traffic Engineer (Workzone Traffic Maintenance)

#### Montgomery County Department of Environmental Protection

Gene Gopenko Project Manager for Wheaton Branch Flood Mitigation project

Jim Stiles
Manager, Design and Construction

#### Engineering Consultant: GPI, Inc.

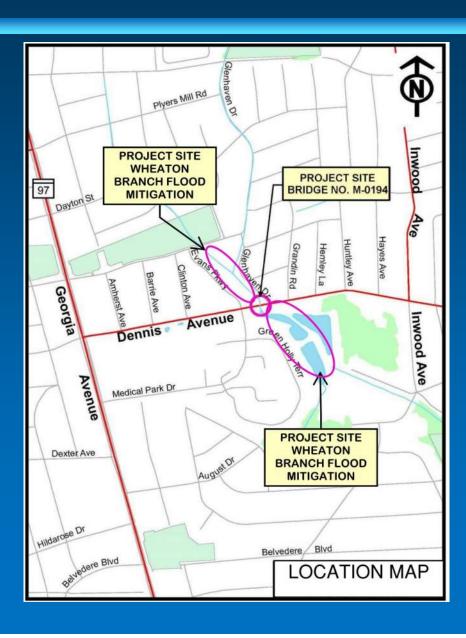
Angie Strevig Project Manager

Melissa Ryder Water Resource Engineer

Ben Wilson Structural Engineer



# **Project Location**





# **Purpose and Need**





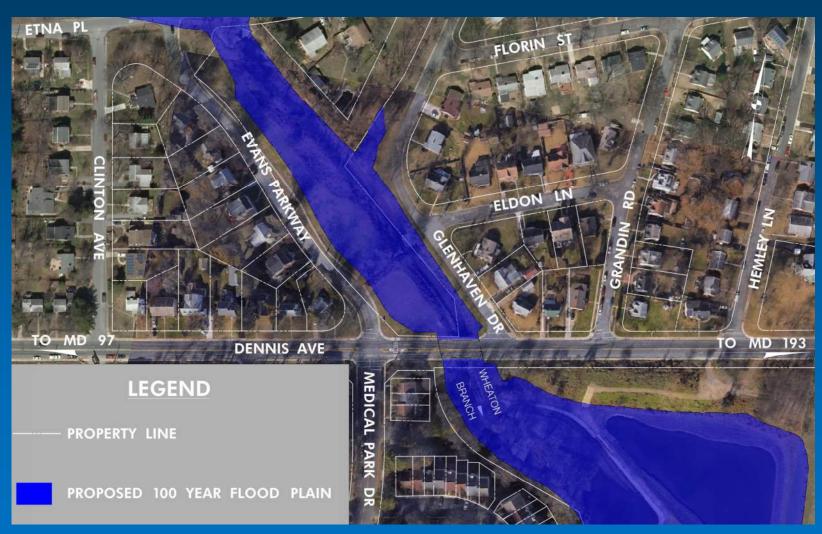


# **Existing Wheaton Branch Flood Plain**





# **Proposed Wheaton Branch Flood Plain**



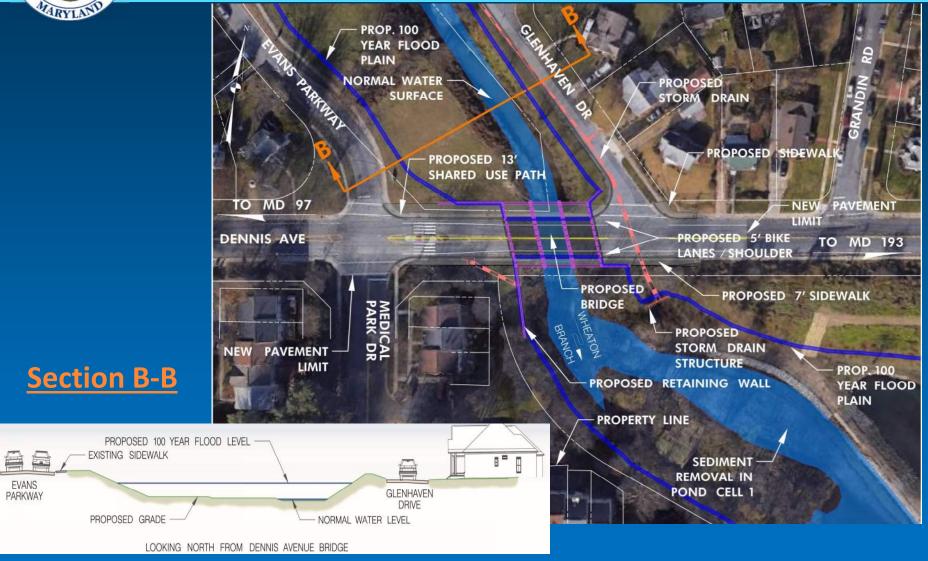


#### **Existing Dennis Avenue and Wheaton Branch**





#### **Proposed Dennis Avenue and Wheaton Branch**





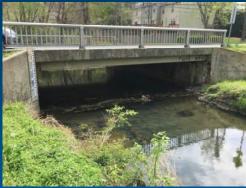
#### **Riser Structure Modifications**



**Riser Structure Location** 

# **Existing Dennis Avenue Bridge**





North
elevation
(looking
downstream)

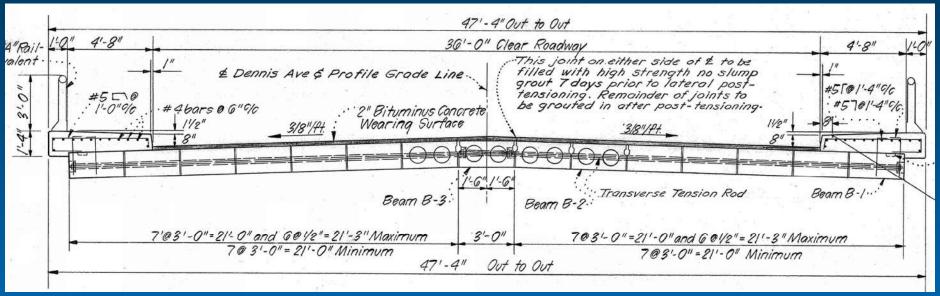


South elevation (looking upstream)

- Constructed in 1960 (60 years old)
- Single Span bridge with concrete voided slab beams
- 29'-0" Clear span between abutment faces
- Cantilever abutments and wingwalls on concrete piles



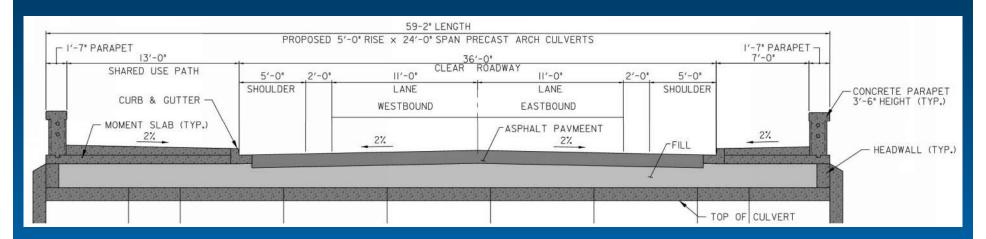
# **Existing Bridge – Typical Section**



- Lane Width (two lanes) = 15'-0"
- Shoulder Width = 3′-0″′
- Clear Roadway Width = 36'-0"
- Sidewalk Width = 4'-8"
- Out-to-out Width = 47'-4"



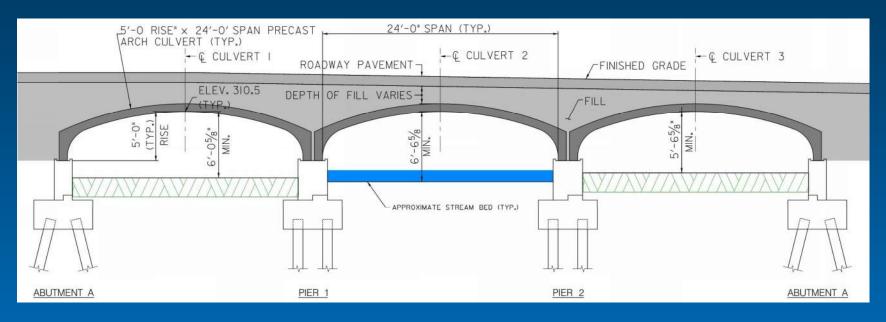
# **Proposed Bridge – Typical Section**



- Lane Width (two lanes) = 11'-0"
- Bicycle Compatible Shoulder Width = 5'-0"
- Clear Roadway Width = 36'-0"
- Sidewalk Width (south side) = 7'-0"
- Shared Use Path (north side) = 13'-0"
- Out-to-out Width = 59'-2"



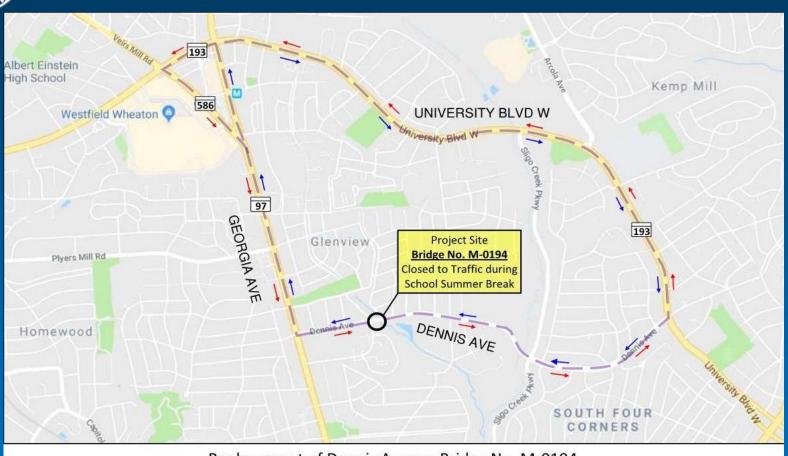
#### **Proposed Bridge – Elevation (Upstream)**



- Three-cell precast concrete arch culvert (bottomless culverts)
- 24'-0" individual clear spans (80'-0" overall length)
- Concrete stub abutments and piers on steel piles



#### **Vehicular Traffic Detour**



Replacement of Dennis Avenue Bridge No. M-0194

#### — — — — — 5-Mile Vehicular Traffic Detour

→ Dennis Ave EB – University Blvd (MD 193) WB – Veirs Mill Rd (MD 586) SB – Georgia Ave (MD 97) SB – Dennis Ave EB

Dennis Ave WB – Georgia Ave (MD 97) NB – University Blvd (MD 193) EB – Dennis Ave WB



#### **Temporary Pedestrian & Bicycle Access**



- Provide Safe Pedestrian and Bicyclist Access during Construction
- Minimize Impact to Residential Properties

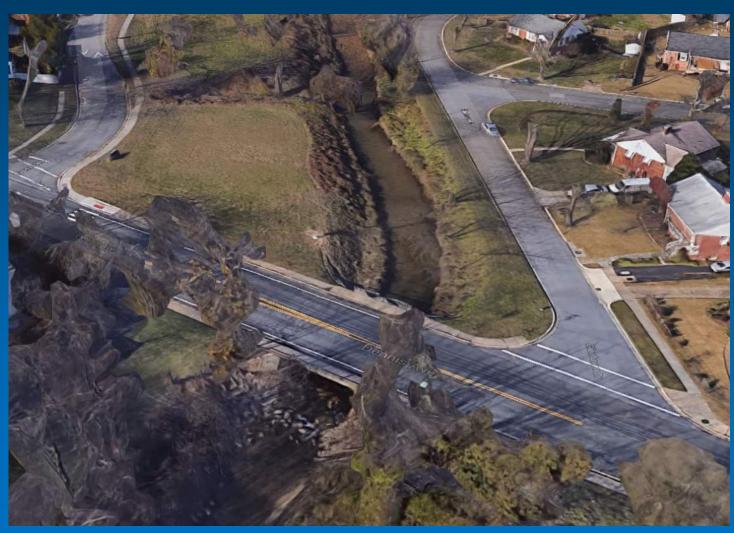


### **Minimize Community Disruption**

- Detour vehicular traffic to shorten construction duration (Closure planned for school summer break)
- Maintain pedestrian and bicycle access with Temporary Pedestrian Bridge
- Coordination with Police, Fire and Rescue
- **♦** Work hours will follow County noise ordinances
- Minimal easements, no right-of-way needs
- Proper Erosion and Sediment Controls implemented to reduce impacts of storms during construction
- FEMA floodplain map revisions will affect some homeowners insurance



# **Existing Dennis Avenue Bridge and Wheaton Branch Looking North - Bird's Eye View**





#### Proposed Dennis Avenue Bridge and Wheaton Branch Looking North - Bird's Eye View





## **Estimated Project Costs**

- Replacement of Dennis Avenue Bridge M-0194 (DOT)
  - Current Estimated Total Cost = \$5.6M
  - Federal Funds = \$3.6M
  - County Funds = \$2.0M
- Wheaton Branch Flood Mitigation (DEP)
  - Current Estimated Total Cost = \$3.2M
  - Anticipated partial funding by FEMA Grant
  - Balance funded by Montgomery County



# **Estimated Project Schedule**

•	Final Design Complete	Summer	2021
<b>•</b>	Advertise for Construction	Fall	2021
<b>•</b>	Begin Flood Mitigation Construction	Spring	2022
<b>•</b>	Begin Bridge Construction	Spring	2022
<b>•</b>	<b>End Bridge Construction</b>	Fall	2022
<b>•</b>	End Flood Mitigation Construction	Winter	2022

#### **Next Step**



#### Proceed with Final Design based on

- Comments from Agencies –
   FHWA, MSHA, MCDPS, MDE, FEMA, M-NCPPC, etc.
- Feedback from Community –
   Comment Period: ONE MONTH

For project information, or to submit additional comments, please contact:

DOT Project Manager: Greg Hwang Phone: 240-777-7279

Email: <u>Greg.Hwang@montgomerycountymd.gov</u>

Division of Transportation Engineering Home Page: <a href="https://www.montgomerycountymd.gov/dot-dte/">https://www.montgomerycountymd.gov/dot-dte/</a>

DEP Project Manager: Gene Gopenko Phone: 240-777-7723

Email: <u>Gene.Gopenko@montgomerycountymd.gov</u>

**Department of Environmental Protection Home Page:** 

https://www.montgomerycountymd.gov/DEP/



# Dennis Avenue Bridge Replacement and Wheaton Branch Flood Mitigation Public Meeting

